**PROJECT MONITORING AND EVALUATION**

**ASSIGNMENT 1**

**1. GIVING EXAMPLES DIFFERENTIATE BETWEEN MONITORING AND EVALUATION.**

**DEFINITION OF MONITORING.**

In simple terms, Project monitoring is project tracking.

It is the periodic tracking of any activity’s progress through systematic and continuous collection, analysis and use of information for management control and decision making.

This need for systematic and continuous progress tracking stems from the responsibility/task endowed on project management teams to establish sufficient controls to ensure that projects/programs stay on track towards the achievement of their objectives.

The process of monitoring involves the measurement of set targets and milestones in order to measure project progress and achievement. Monitoring ascertains whether the project inputs are producing the planned outputs, whether the actual project implementation is consistent with its design.

“Project monitoring is an integral part of the day- to- day management of projects and the data gathered through the various monitoring methodologies employed provide the information needed by the project management team to identify and solve implementation problems as well as assess progress.

The logical framework, Implementation schedule, Activity schedules and Project budget provide the basis for monitoring.

There are also a number of different levels of monitoring, each of which are related to what kind of information is relevant, and the regularity of monitoring as illustrated in the table below.”

(**European commission civil society fund in Ethiopia “Introduction to Monitoring and Evaluation using the Logical Framework Approach”)**

|  |  |
| --- | --- |
| **Monitoring Level** | **Regularity** |
| Which Activities are underway and what progress has been made? | Weekly |
| At what rate are means being used and cost incurred in relation to progress in implementation? | Monthly |
| Are the desired Results being achieved? | Quarterly |
| To what extent are these Results furthering the Project Purpose?  What changes in the project environment occur? Do the Assumptions hold true? | Six – Monthly |

**b) DEFINITION OF EVALUATION**

“Evaluation is an assessment, systematic and objective as possible, of an ongoing or completed project/program in terms of its design, implementation and results. The aim of an evaluation is to determine the relevance and fulfilment of objectives, developmental efficiency, effectiveness, impact and sustainability. An evaluation should provide information that is credible and useful, enabling the incorporation of lessons learned into the decision making process of both recipients and donors.” (**European commission civil society fund in Ethiopia “Introduction to Monitoring and Evaluation using the Logical Framework Approach”)**

There are two main types of evaluations:-

1. **Periodic Evaluations-** these are conducted in the course of project implementation to review implementation progress, predict progress, likely effects and highlight necessary adjustments in project design.
2. **Terminal Evaluations-** are evaluations carried out at the end of a project to provide an overall assessment of project performance and effects/ impacts, as well as to assess the extent to which the project has succeeded in meeting their objectives and their potential sustainability.

**DIFFERENCE BETWEEN MONITORING AND EVALUATION**

Evaluations differ from monitoring in three main aspects

1. Timing – this is in reference to the frequency of the activity. Monitoring is continuous /periodic, that is daily, weekly, monthly, quarterly etc. depending on the need whereas evaluations are episodic/ intermittent.
2. Focus- the main action of monitoring is keeping track/oversight with the aim of improving efficiency through adjustment of work plans, whereas the main action of evaluations is assessment whose purpose is to improve effectiveness and impact of both current and future programs.
3. Level of detail – Evaluations are more rigorous in their procedures, design and methodology and generally involve more extensive analysis.

Another key distinction though not in all instances is that evaluations are usually done independently to provide managers and staff with an objective assessment of whether or not they are on track.

Source: Information on formative and summative evaluations from The European Commission Civil Society Fund in Ethiopia’s Introduction to Monitoring and Evaluation Using the Logical Framework Approach.

<https://www.eeas.europa.eu>

**2. WHY IS BASELINE SURVEY AN IMPORTANT PART OF PROJECT MANAGEMENT?**

Monitoring involves repeated assessment of a situation over time, therefore having an initial basis for comparison helps you assess what has changed over a period of time and if this change is a result of the project’s presence. This information about the initial state/situation or starting point before any intervention has taken place is called the baseline, and is established through a baseline survey.

Baseline surveys are important in summative evaluations as the data in the baseline survey becomes the reference against which project impact or results are assessed and proved.

Since the logic behind carrying out baseline surveys is that, by comparing data that describe the situation to be addressed by a project or a program with data generated after the completion of the project, evaluators would be able to measure progress or changes in the situation and link those changes to project interventions, baseline data also might be useful to track changes that the project would bring about over time and to refine project indicators that are important for project monitoring .

**3. DISTINGUISH BETWEEN SUMMATIVE AND FORMATIVE EVALUATION METHODS WITH EXAMPLES.**

**SUMMATIVE EVALUATIONS**

Summative evaluations sometimes referred to as impact or outcome evaluation, are evaluations whose purpose is to assess a mature project’s success in reaching its stated goals. This evaluation “sums up” the achievements, impact and lessons learned in the project.

The timeline of a summative evaluation is at the end of the project, and the information collected in a summative evaluation is about outcomes and the related processes, strategies and activities that have led to them and they are usually carried out by external evaluators or people not directly associated with the project

There are two types of summative evaluations:-

1. End evaluations – Aims to establish the situation when external aid is terminated and to identify the possible need for follow up activities either by donors or project staff.
2. Ex-post evaluations – are carried out two or five years after external support is terminated and its main purpose is to assess what lasting impact the project has had or is likely to have and to extract lessons of experience.

The main question that impact evaluations try to answer is whether the intervention or project has made a difference for the target groups and the proof of the difference the project has made is measured using two main evaluation models, that is the pretest-posttest model and the comparison group model. Both of these models differ in terms of the extent to which they are able to identify and prove project outcome or impact and link them with project interventions.

Examples of basic questions used in a summative evaluation may include:-

1. To what extent did the project meet the stated goals for change or impact?
2. What was the extent of impact on the beneficiaries of the project (e.g. for a higher education project, impact could be assessed in terms of increased numbers of student enrolments from diverse backgrounds, increased interest in scientific courses, changes in the courses offered i.e. increased number of course offerings )
3. Were the results worth the project’s cost
4. Can the program be sustained
5. Which components of the project were the most effective, which components are in need of improvements?

Because summative evaluations are an appraisal of worth or merit they are used to inform decisions in regarding follow up activities after the project has wound up or decisions regarding future programs, The decision alternatives a project may take up after a summative evaluation may include:-

1. Disseminate/replicate the intervention to other sites or agencies.
2. Continue project/program funding.
3. Increase program/project funding.
4. Continue the program/project on probationary basis.
5. Modify the program/project and try again.
6. Discontinue the program/project.

**FORMATIVE EVALUATIONS**

Whereas the purpose of a summative evaluation is to assess the quality and impact of a fully implemented project, the purpose of a formative evaluation is to assess initial and ongoing project activities, so as to provide information to monitor and improve the project (i.e. change how the project is structured and carried out).

Formative evaluations begin during project development and continue to be done at several points in the developmental life of a project and its activities and throughout the life of the project. These types of evaluations are called interim evaluations.

There are two components of formative evaluation.

1. Implementation evaluations
2. Progress evaluation.
3. **IMPLEMENTATION EVALUATIONS**

Also called process evaluation, the underlying principle of this evaluation is that before you can evaluate the outcomes or impact of a program, you must first make sure the program and its components are really operating, and if so, that they are operating according to the proposed plan or description.

Therefore an implementation or process evaluation’s purpose is to assess whether the project is being conducted as planned.

A series of implementation questions guide implementation evaluations.

Examples of these questions amongst other project specific ones may be:-

1. Was a solid project management plan developed and followed?
2. To what extent do the the activities and strategies match those presented in the plan? is there harmony? Why are there changes and are they justifiable?
3. Are the activities carried out by the appropriate personnel?
4. Which activities or strategies are more effective in moving towards achievement of goals and objectives
5. Are the project actual costs in line with initial budget allocations?

If carried out effectively, an implementation evaluation can facilitate efficient project implementation and ensure that there are no unwelcome surprises during monitoring.

It is also important to note the difference between implementation evaluations and monitoring evaluations as these two processes are sometimes confused.

An implementation evaluation is an early check by the project staff, or the evaluator to see if all essential elements are in place and operating, whereas a monitoring evaluation is an external check typically by a monitor from the funding agency whose responsibility is determining the progress and compliance on a contract or grant for the project.

1. **PROGRESS EVALUATIONS**

The purpose of a progress evaluation is to assess progress in meeting the goals of the program and the project. It involves collecting information to learn whether or not the benchmarks of participant progress were met and to point out unexpected developments. Data collected as part of a progress evaluation can also contribute to or form the basis for a summative evaluation conducted at some future date.

Progress evaluation is useful throughout the life of the project, but is most vital during the early stages when activities are piloted and their individual effectiveness or articulation with other project components is unknown.

Source: Information on summative and formative evaluations from The National Science Foundation 2002 *User-Friendly Handbook for Project Evaluation* (NSF 02-057). <https://www.nsf.gov/pubs/2002/nsf02057/nsf02057.pdf>

**4. MONITORING AND EVALUATION USES BOTH QUALITATIVE AND QUANTITATIVE METHODS TO MEASURE THE SUCCESS AND IMPACT OF THE PROJECT, HOWEVER, ECONOMISTS AND STATISTICIANS ADAPT A ONE SIDED METHOD (QUANTITATIVE) TO ANALYZE THE RESULTS**

1. **IDENTIFY THE POTENTIAL DANGERS OF A ONE SIDED MONITORING SYSTEM.**

Each of the two methodologies, qualitative and quantitative that are used in monitoring and evaluation activities have their comparative merits and demerits in addressing the particular concerns and needs of a project’s M&E process, none can be exclusively deemed better than the other.

Thus one of the main dangers of a one sided monitoring and evaluation system centers on the value of the data gathered. “Quantitative and qualitative techniques provide a tradeoff between breadth and depth, and between generalizability and targeting specific populations.” **(Westat, Frierson Katzenmeyer et al, NSF 2002, user Friendly handbook for Project Evaluation)**

Using a one sided approach would mean one of these aspects is not covered adequately or ignored all together i.e. a purely quantitative approach would provide breadth (the number of cases/occurrences for example) but lack in in -depth analysis of the situation and context (social, political and cultural contexts) of projects as well as new insights into the beneficiaries’ needs. This subsequently will lead to conclusions that are not comprehensive or broadly generalizable information.

The second danger in using a one sided approach, focuses on scientific rigor. That is, does the data gathered have soundness in terms of objectivity, accuracy and verifiability?

While data collected through quantitative methods are often believed to yield more objective and accurate information because they were collected using standardized methods, can be replicated, and, unlike qualitative data, can be analyzed using sophisticated statistical techniques, the distinction is too simplistic because both approaches may or may not satisfy the canons of scientific rigor as much qualitative information can be quantified. For example, opinions can be clustered into groups and then counted, thereby becoming quantitative. However one can never make quantitative information more qualitative, you cannot extract an opinion from a number, therefore no one methodology is completely adequate in terms of scientific rigor

It is also increasingly recognized that all data collection—quantitative and qualitative—operates within a cultural context and is affected to some extent by the perceptions and beliefs of investigators and data collectors, moreover Quantitative researchers are becoming increasingly aware that some of their data may not be accurate and valid, because the survey respondents may not understand the meaning of questions to which they respond, and because people’s recall of events is often faulty thus affecting the validity of the data collected and building the case for cross validation through a mix methodology approach instead of a single methodology approach to data collection.

Source: Information on comparison of Data collection methods provided from The National Science Foundation 2002 *User-Friendly Handbook for Project Evaluation* (NSF 02-057). <https://www.nsf.gov/pubs/2002/nsf02057/nsf02057.pdf>

Bamberger Micheal, Rao Vijayendra,Woolcock Micheal, “Using Mixed Methods in Monitoring and Evaluation : Experiencs from international development” (WPS5245 ).

<http://docments.worldbank.org/curated/en/884171468156574032/using-mixed-methods-in-monitoring-and-evaluation-experiences-from-internaional-development>

1. **CRITICALLY ANALYZE THE QUANTITATIVE METHOD OFTEN EMPLOYED BY ECONOMISTS AND STATISTICIANS IN M&E DEVELOPMENT PROJECTS**

The quantitative methodology employed by economists and statisticians involves the collection and analysis of data which computes the values and counts, and the results can be expressed in numerical terms.

“Data collected through the quantitative method is often believed to yield more objective and accurate information because they were collected using standardized methods, can be replicated, and, unlike qualitative data, can be analyzed using sophisticated statistical techniques**.**” **(The National Science Foundation 2002 *User-Friendly Handbook for Project Evaluation*)**

In line with this argument, the quantitative method is traditionally employed in summative evaluations which require “hard” data (quantitative data) to judge the ultimate value of the project as opposed to qualitative methods that are more suitable for formative evaluations, furthermore some stakeholders of the projects (usually at national level) are accustomed to basing funding decisions on numbers and statistical indicators.

Examples of quantitative methods are:-

* Surveys/ questionnaires.
* Literature Search from Published articles (in newspapers, journals, magazines).
* Documentation review of reports and statistical records from Government agencies, official documents such as Land records, deed and land title registries as well as reports and records from Non –Governmental Organizations and Institutions such as Think-tanks, policy institutes, research and advocacy organizations, Universities, trade associations, civic unions and business groups etc.

A summary of the quantitative tools/ methods is given in the table below

|  |  |  |  |
| --- | --- | --- | --- |
| METHOD | DESCRIPTION | ADVANTAGES | DISADVANTAGES/CHALLENGES |
| 1. Surveys/questionnaires | Used to gain data from a large number of people in a structured way through oral interviews or written questionnaires made up of open ended or closed questions that are administered to a sample of respondents.  The data derived from surveys often require statistical analysis | -Often seen to produce  Reliable information that can be verified and replicated using proven statistical techniques.  -Easy to administer especially with the advancement of technology e.g. via computer assisted calling, email, web based surveys, mobile technology.  -Easy to  compare and analyze data as the time and steps between data collection and analysis is shortened by data being directly inputted in databases.  -Enables Collection of a lot of data as information is usually gathered from a large number of respondents. | -Surveys provide breadth (i.e. numbers) but not depth, i.e. deep understanding of the problem the project is trying to solve  -They can be costly in terms of specialized knowledge required to analyze data using specialized statistical tools.   * Self- report may lead to biased reporting * Sometimes analysis may be difficult specifically when it comes to open ended questions |
| 2. Literature research | This is a secondary source of data where information is gathered from the published work of others research and evaluations | The main advantage is that it is cost effective as the ground work of collecting and analyzing data has already been done. | The main disadvantage is that it is hard to assess the validity and credibility of the data. |
| 3. Document review | This method entails gathering data from an existing written document (public or private) not prepared for the purposes of the evaluation or at the request of the inquirer.  -Public records can be collected from outside (external) or within  (Internal) the setting in which the evaluation is taking place. Examples of  external records are census and vital statistics reports, county office  records, newspaper archives, and local business records  Personal documents are first-person accounts of events and experiences.  These “documents of life” include diaries, portfolios, photographs,  Artwork, schedules, scrapbooks, poetry, letters to the paper, etc. | Existing records often provide insights into a setting or group that cannot be observed or noted in another way, such as interests, positions, political climate, and public attitudes.  -Are readily Available  -Are inexpensive  -Provide information on political trends or sequences  -provide opportunity for study of trends over time.  -Are unobtrusive that is it does not interrupt program or clients routine | -May give incomplete or partial data.  -May be inaccurate or of questionable authenticity  \_ in some instances documents may be difficult to access thus posing a challenge in terms of time constraints.  -Analysis may be time consuming |

1. **a) DEFINE LOGICAL FRAMEWORK**

A logical frame is a practical design tool, structured as a 4x4 (four by four) matrix used in project design and implementation.

The four by four matrix is both dynamic and interactive. The contents of the cells interact with one another in order organize all the components of a project , that is, objectives, purpose, measures, assumptions as well as inputs and outcomes in a logical way that is simple, flexible and practical to use.

1. **DEFINE AND EXPLAIN KEY COMPONENTS OF LOGICAL FRAMEWORK.**

The logical framework matrix is made up of four rows and four columns.

Each of cells of the four columns is represented by one of the following project components in order:

Column1 - Objectives

Column 2 - Success measures

Column 3 - Means of verification

Column 4 - Assumptions

Each of the column cells is populated by the answers to the following planning questions respectively:-

1. What are we trying to accomplish and why? (definition of hierarchy of objectives)
2. Looking at each objective, we then ask, what does success look like and how are we going to measure it? (definition of success measures)
3. How are we going to measure that we are successful? (definition of means of verification, indicators, functions of quality, quantity, time and performance specifications)
4. What conditions, which are out of our control, must exist for us to succeed? (Definition of Assumptions).

Key to note is that there are different levels of objectives in the hierarchy. These are high level objectives (strategic objectives) and lower level objectives (project objectives). We need to organize these objectives in relationship to each other and apply the IF - THEN causal logic to link and align them so that there is no disconnect between high level strategic objectives and project objectives.

After the columns we have the rows of the log frame matrix, which are also four and are defined as the four levels of the logical frame.

They are as follows:-

Row 1 - Goals

Row 2 - Purpose

Row 3 - outcomes

Row 4 - inputs

1. Goals – This is the strategic intent or aiming point of the project. The overall benefit that will come as a result of the project
2. Purpose – The change that will occur as a result of the project. All projects are instruments of change and therefore purpose spells out what will have changed once the project has wrapped up.
3. Outcomes- a set of deliverables, tangible results that are necessary to achieve project purpose. For example something built, courses conducted. Management system designed. What is in your accountability and ability to deliver?
4. Inputs – The activities and resources needed to produce the expected outcomes

Note: Projects consist of multiple objectives at different “levels” and causal thinking (also called if-then or means-ends) lets us logically link objectives at various levels.  If-then thinking offers a compact language to express our strategy as a predictive hypothesis.

**Using the If- Then causal logic the implementation logic will therefore be as follows : if INPUTS then OUTCOMES if OUTCOMES then PURPOSE and if PURPOSE then GOALS.**

In addition to these four items of the rows there are two other important items

**Means**

These are the necessary means to undertake the activities. They include personnel, materials, and infrastructure. They describe the resources required for the successful implementation of the project activities. They are also basically a list of items that will need to be budgeted for.

**Cost**

This states the overall cost of the project, and the expected sources. It is not a detailed budget!

All these project components interact with each other in the log frame matrix using three directional logics.

1. Vertical Logic – shows the logical connection of the hierarchy of objectives and flows from bottom up. Lowest level to the highest level .
2. Horizontal Logic –shows the logical connection of success as defined and the means of verification.
3. Zigzag Logic – shows the logical connection of inputs, outcomes, purpose and goals when assumptions are factored in at each level.

**Using the If- Then causal logic the implementation logic of the matrix will be; –**

**IF we do these ACTIVITIES using these means and at this cost, plus our initial ASSUMPTIONS are valid THEN we should be able to produce these OUTCOMES. IF the OUTCOMES produced together with the following set of ASSUMPTIONS hold true THEN we should achieve our PURPOSE and IF our PURPOSE and subsequent set of ASSUMPTION holds true THEN we will achieve our OBJECTIVE(S).**

**EXAMPLE OF A LOGFRAME MATRIX**

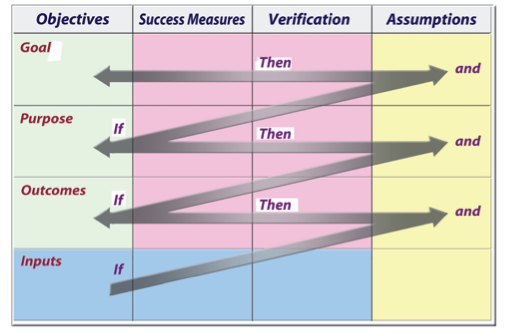


Image courtesy of management pro.com